

## AMENDMENTS TO THE CLAIMS

**Claim 1 (Currently Amended)** A unit-to-unit data exchange system for exchanging data between units connected to each other via a communication medium, the unit-to-unit data exchange system comprising:

a first unit ~~having~~ for storing first content data of interest that can be exchanged and for encrypting the first content data of interest when the first content data of interest is exchanged;

a second unit for storing second content data of interest to the first unit and for encrypting the second content data of interest when the second content data of interest ~~to the first unit~~ is exchanged to the first unit; and

an exchange completion data keeping device (i) connected to the first unit and the second unit via the communication medium (ii) for ~~keeping~~ storing first exchange completion data that is a first decryption key, and that is necessary, ~~after completion of a data exchange between the first unit and the second unit~~, for reproducing encrypted second content data of interest to the first unit that is obtained by the first unit from the second unit, and (iii) for storing ~~keeping~~ second exchange completion data that is a second decryption key, and that is necessary, ~~after completion of the data exchange between the first unit and the second unit~~, for reproducing encrypted first content data of interest to the second unit that is obtained by the second unit from the first unit,

wherein the exchange completion data keeping device receives a first communication result from the first unit when a first communication section between the first unit and the second unit is terminated, and receives a second communication result from the second unit when a second communication section between the first unit and the second unit is terminated,

wherein the exchange completion data keeping device determines whether the first unit has successfully received from the second unit the encrypted second content data of interest to the first unit based on the first communication result, and determines whether the second unit has successfully received from the first unit the encrypted first content data of interest to the second unit based on the second communication result, and

wherein the exchange completion data keeping device ~~includes exchange completion data transmission means for transmitting~~ transmits the first exchange completion data to the first unit and ~~for transmitting~~ transmits the second exchange completion data to the second unit, only when the first unit has successfully received from the second unit the encrypted second content data of interest to the first unit and when the second unit has successfully received from the first unit the encrypted first content data of interest to the second unit.

**Claim 2 (Currently Amended)** The unit-to-unit data exchange system according to claim 1,

wherein the first unit includes:

a first exchange completion data production means unit for producing the second exchange completion data; and

a first exchange completion data transmission means unit for transmitting the second exchange completion data produced by the first exchange completion data production-~~means unit~~ to the exchange completion data keeping device,

wherein the second unit includes:

a second exchange completion data production means unit for producing the first

exchange completion data; and

a second exchange completion data transmission means unit for transmitting the first exchange completion data produced by the second exchange completion data production-~~means unit~~ to the exchange completion data keeping device, and

wherein the exchange completion data keeping device further includes an exchange completion data keeping means storing unit for keeping storing the first exchange completion data ~~transmitted from the exchange completion data transmission means~~ and the second exchange completion data ~~transmitted from the exchange completion data transmission means~~, such that the first unit, from which the second exchange completion data has been transmitted, can be identified and the second unit, from which the first exchange completion data has been transmitted, can be identified.

**Claim 3 (Currently amended)**      The unit-to-unit data exchange system according to claim 2,

wherein the first unit further includes:

a first data conversion means unit for converting the first content data of interest to the second unit that is owned by the first unit to the encrypted first content data of interest to the second unit that can be reproduced successfully only by using the second exchange completion data; and

a first data recovery means unit for recovering the second content data of interest to the first unit that can be reproduced successfully, from the encrypted second content data of interest to the first unit received from the second unit, by using the first exchange completion

data, and

wherein the second unit further includes:

a second data conversion means unit for converting the second content data of interest to the first unit that is owned by the second unit to the encrypted second content data of interest to the first unit that can be reproduced successfully only by using the first exchange completion data; and

a second data recovery means unit for recovering the first content data of interest to the second unit that can be reproduced successfully, from the encrypted first content data of interest to the second unit that is received from the first unit, by using the second exchange completion data.

**Claim 4 (Currently Amended)** The unit-to-unit data exchange system according to claim 1, wherein:

the first unit further includes a first exchange completion data production requesting means unit for requesting the exchange completion data keeping device to produce the second exchange completion data;

the second unit further includes a second exchange completion data production requesting means unit for requesting the exchange completion data keeping device to produce the first exchange completion data; and

the exchange completion data keeping device further includes:

an exchange completion data production means unit for producing the first exchange completion data in response to the requests from the first exchange completion data

production requesting ~~means~~ unit and for producing the second exchange completion data in response to the requests from the second exchange completion data production requesting ~~means~~ unit; and

an exchange completion data ~~keeping means~~ storing unit for ~~keeping~~ storing the first exchange completion data and the second exchange completion data produced by the exchange completion data production ~~means~~ unit so that the first unit and the second unit can be respectively identified.

**Claim 5 (Currently Amended)** The unit-to-unit data exchange system according to claim 4, wherein:

each of the first and second units further includes:

a data conversion ~~means~~ unit for converting content data owned by the respective unit to encrypted content data that can be reproduced successfully only by using the respective exchange completion data; and

a data recovery ~~means~~ unit for recovering the content data of interest to the respective unit that can be reproduced successfully, from encrypted content data received from another of the first and second units, by using the respective exchange completion data ~~transmitted from the exchange completion data transmission means~~;

the exchange completion data keeping device further includes a conversion process data production/transmission ~~means~~ unit for (i) producing first and second conversion process data respectively used for converting content data to encrypted content data that can be reproduced successfully by using the first and second exchange completion data, and (ii) transmitting the

first conversion process data to the second unit and the second conversion process data to the first unit;

the data conversion ~~means~~ unit of the first unit converts the first content data of interest to the second unit to the encrypted first content data of interest to the second unit by using the second conversion process data transmitted from the conversion process data production/transmission ~~means~~ unit; and

the data conversion ~~means~~ unit of the second unit converts the second content data of interest to the first unit to the encrypted second content data of interest to the first unit by using the first conversion process data transmitted from the conversion process data production/transmission ~~means~~ unit.

**Claim 6 (Currently Amended)** The unit-to-unit data exchange system according to claim 5, wherein:

the first conversion process data is a first encryption key;

the first exchange completion data is a the first decryption key corresponding to the first encryption key;

the second exchange process data is a second encryption key; and

the second conversion completion data is a the second decryption key corresponding to the second encryption key.

**Claim 7 (Currently Amended)** The unit-to-unit data exchange system according to claim 1, wherein:

the first unit further includes a first communication result notification unit for notifying the exchange completion data keeping device of the first communication result when the first communication session is terminated;

~~each of the first and second units~~ unit further includes a second communication result notification means unit for notifying the exchange completion data keeping device of ~~a~~ the second communication result when ~~a the second communication session with another of the first and second units~~ is terminated; ~~and~~

~~the exchange completion data transmission means~~ the exchange completion data keeping device determines whether or not the first unit ~~and the second unit have~~ has successfully received the ~~respective encrypted second content data of interest to the first unit~~ based on the first communication results result from the first communication result notification means unit of the first unit ~~and the second unit;~~ and

the exchange completion data keeping device determines whether or not the second unit has successfully received the encrypted first content data of interest to the second unit based on the second communication result from the second communication result notification unit of the second unit.

**Claim 8 (Currently Amended)** The unit-to-unit data exchange system according to claim 7, wherein:

the first communication result indicates whether or not the encrypted second content data of interest to the first unit has been received successfully at the first unit;

~~the respective second communication result of the first unit and the second unit is~~

~~information indicating~~ indicates whether or not the ~~respective~~ encrypted first content data of interest to the second unit has been received successfully at the second unit; and

~~the exchange completion data transmission means~~ the exchange completion data ~~keeping device transmits exchange completion data~~ transmits the first exchange completion data to the first unit and transmits the second exchange completion data to the second unit, if the ~~exchange completion data transmission means receives information indicating that the respective encrypted content data of interest has been received successfully from both the first unit and second unit~~ only when the first communication result indicates that the first unit has successfully received from the second unit the encrypted second content data of interest to the first unit and when the second communication result indicates that the second unit has successfully received from the first unit the encrypted first content data of interest to the second unit.

**Claim 9 (Cancelled)**

**Claim 10 (Currently Amended)** The unit-to-unit data exchange system according to claim 1, wherein each of the first unit and the second unit further ~~include~~ includes a resend requesting ~~means~~ unit for requesting another of the first and second units to resend the respective encrypted content data of interest if the respective unit fails to fully receive the respective encrypted content data of interest from the other of the first unit and second unit.

**Claim 11 (Currently Amended)** A unit for exchanging content data owned by the unit with content data of interest to the unit that is owned by another unit, wherein



the unit and the other unit encrypt the content data owned thereby, respectively, when the respective content data is exchanged therebetween,

the unit comprises:

an exchange completion data production means unit for producing first exchange completion data that is a decryption key, and that is necessary for reproducing ~~the~~ encrypted first content data that is obtained by encrypting ~~the~~ first content data owned by the unit;

an exchange completion data registration means unit for registering the first exchange completion data produced by the exchange completion data production means unit at an exchange completion data keeping device ~~for keeping,~~ the exchange completion data keeping device storing the first exchange completion data; and

an exchange completion data obtaining means unit for obtaining, from the exchange completion data keeping device, second exchange completion data that is a decryption key, and that is necessary for reproducing encrypted second content data obtained from the other unit when a communication session with the other unit is terminated, and

wherein the exchange completion data keeping device transmits (i) the first exchange completion data to the other unit, and (ii) the second exchange completion data to the unit, the transmission of the first and second exchange completion data being performed only when the unit ~~and the other unit have~~ has successfully received the encrypted second content data of interest and when the other unit has successfully received the encrypted first content data of interest.

**Claim 12 (Currently Amended)** The unit according to claim 11, further comprising:

a data conversion ~~means~~ unit for converting the first content data of interest to the other unit that is owned by the unit, to the encrypted first content data of interest to the other unit that can be reproduced successfully only by using the first exchange completion data; and

a data recovery ~~means~~ unit for recovering ~~the~~ second content data of the unit that can be reproduced successfully, from the encrypted second content data of interest to the unit that is received from the other unit, by using the second exchange completion data obtained by the exchange completion data obtaining ~~means~~ unit.

**Claim 13 (Currently Amended)** The unit according to claim 12, further comprising an exchange history storing ~~means~~ unit for storing a history of data exchanges made with other units, wherein:

the data conversion ~~means~~ unit changes a data conversion method based on the exchange history; and

the exchange completion data production ~~means~~ unit changes a method of producing exchange completion data based on the exchange history.

**Claim 14 (Currently Amended)** The unit according to claim 11, further comprising a resend requesting ~~means~~ unit for requesting the other unit to resend encrypted content data of interest to the unit if the unit fails to fully receive the encrypted content data of interest to the unit.

**Claim 15 (Currently Amended)** A unit for exchanging content data owned by the unit with content data of interest to the unit that is owned by another unit,

wherein the unit and the other unit encrypt the content data owned thereby, respectively, when the respective content data is exchanged therebetween,

wherein the unit comprises:

an exchange completion data production requesting means unit for requesting an exchange completion data keeping device ~~for keeping exchange completion data~~ to produce first exchange completion data that is a decryption key, and that is necessary for reproducing encrypted first content data obtained by encrypting ~~the first~~ content data owned by the unit, the exchange completion data keeping device storing the first exchange completion data; and

an exchange completion data obtaining means unit for obtaining, from the exchange completion data keeping device, second exchange completion data that is a decryption key, and that is necessary for reproducing encrypted second content data obtained from the other unit when a communication session with the other unit is terminated, and

wherein the exchange completion data keeping device transmits (i) the first exchange completion data to the other unit, and (ii) the second exchange completion data to the unit, the transmission of the first and second exchange completion being performed only when the unit ~~and the other unit have~~ has successfully received the encrypted second content data of interest and when the other unit has successfully received the encrypted first content data of interest.

**Claim 16 (Currently Amended)** The unit according to claim 15, further comprising:

a conversion process data reception means unit for receiving conversion process data, the conversion process data being used for converting the first content data of interest to the other unit that is owned by the unit so that the encrypted first content data of interest to be

transmitted to the other unit can be reproduced successfully by using the first exchange completion data sent from the exchange completion data keeping device;

a data conversion ~~means~~ unit for converting the first content data of interest to the other unit that is owned by the unit by using the conversion process data received by the conversion process data reception ~~means~~ unit; and

a data recovery ~~means~~ unit for recovering ~~the~~ second content data of interest to the unit that can be reproduced successfully, from the encrypted second content data of interest to the unit obtained from the other unit, by using the second exchange completion data obtained by the exchange completion data obtaining ~~means~~ unit.

**Claim 17 (Currently Amended)** The unit according to claim 16, further comprising:

an exchange history storing ~~means~~ unit for storing a history of data exchanges made with other units; and

a conversion method notification ~~means~~ unit for notifying the exchange completion data keeping device of a conversion method used by the data conversion ~~means~~ unit based on the exchange history,

wherein the data conversion ~~means~~ unit converts the content data of interest to the other unit that is owned by the unit by using conversion process data using the specified conversion method sent from the exchange completion data keeping device.

**Claim 18 (Currently Amended)** The unit according to claim 15, further comprising a resend requesting ~~means~~ unit for requesting the other unit to resend encrypted content data of interest to

the unit if the unit fails to fully receive the encrypted content data of interest to unit.

**Claim 19 (Currently Amended)** An exchange completion data keeping device used in a system for exchanging content data between ~~units~~ a first unit and a second unit connected to each other via a communication medium, the first unit storing first content data of interest to the second unit and encrypting the first content data of interest, the second unit storing second content data of interest to the first unit and encrypting the second content data of interest, the exchange completion data keeping device comprising:

an exchange completion data keeping means unit for keeping storing (i) first exchange completion data that is a decryption key and that is necessary for reproducing encrypted second content data of interest to the first unit that is encrypted and exchanged between a first unit and a second unit that is obtained by the first unit from the second unit and (ii) second exchange completion data that is a decryption key and that is necessary for reproducing encrypted first content data of interest to the second unit that is obtained by the second unit from the first unit;  
and

a data reception unit for receiving a first communication result from the first unit when a first communication section between the first unit and the second unit is terminated, and receives a second communication result from the second unit when a second communication section between the first unit and the second unit is terminated;

a determination unit for determining whether the first unit has successfully received from the second unit the encrypted second content data of interest to the first unit based on the first communication result, and determines whether the second unit has successfully received

from the first unit the encrypted first content data of interest to the second unit based on the second communication result; and

an exchange completion data transmission means unit for transmitting (i) the first exchange completion data ~~that is necessary for reproducing encrypted content data of interest to the first unit and that is obtained by the first unit to the first unit~~ and (ii) the second exchange completion data ~~that is necessary for reproducing encrypted content data of interest to the second unit and that is obtained by the second unit to the second unit,~~ only when the first unit ~~and second unit have~~ has successfully received from the second unit the encrypted second content data of interest to the first unit and when the second unit has successfully received from the first unit the encrypted first content data of interest to the second unit.

**Claim 20 (Currently Amended)** The exchange completion data keeping device according to claim 19, further comprising:

an exchange completion data production means unit for producing (i) the first exchange completion data in response to a request from the first unit ~~and the second unit~~ and (ii) the second exchange completion data in response to a request from the second unit; and

an exchange completion data keeping means unit for keeping the first exchange completion data and the second exchange completion data produced by the exchange completion data production ~~means unit~~ so that the first unit and the second unit can be identified.

**Claim 21 (Currently Amended)** The exchange completion data keeping device according to claim 20, further comprising a conversion process data production/transmission means unit for

(i) producing conversion process data such that ~~exchanged~~ the encrypted first content data and the encrypted second content data can be reproduced successfully by the first unit and second unit by using the first exchange completion data and the second exchange completion data produced by the exchange completion data production ~~means~~ unit, and (ii) transmitting the conversion process data to the first unit and the second unit.

**Claim 22 (Canceled)**

**Claim 23 (Currently Amended)** The exchange completion data keeping device according to claim ~~22~~ 19, wherein:

the first communication result indicates whether or not the encrypted second content data of interest to the first unit has been received successfully at the first unit;

the second communication result ~~is information indicating~~ indicates whether or not the encrypted first content data of interest to the second unit has been received successfully at the second unit; and

the exchange completion data transmission ~~means~~ unit transmits the first exchange completion data to the first unit and the second exchange completion data to the second unit, when ~~receiving information indicating that the data has been received successfully from the first and second units~~ the first communication result indicates that the encrypted second content data of interest to the first unit has been received successfully at the first unit and when second communication result indicates that the encrypted first content data of interest to the second unit has been received successfully at the second unit.

**Claim 24 (Currently Amended)** The exchange completion data keeping device according to claim 19, further comprising an exchange completion data deletion means unit for deleting the first exchange completion data and the second exchange completion data kept by stored in the exchange completion data keeping device if a predetermined condition is satisfied.

**Claim 25 (Currently Amended)** The exchange completion data keeping device according to claim 24, wherein the predetermined condition ~~is a condition such~~ indicates that the exchange completion data deletion ~~means unit~~ deletes the first exchange completion data transmitted to the first unit and second unit from the exchange completion data transmission means unit and the second exchange completion data transmitted to the second unit from the exchange completion data transmission unit ~~if when~~ the first unit and second units have ~~has~~ successfully received the transmitted first exchange completion data and when the second unit has successfully received the second exchange completion data.

**Claim 26 (Currently Amended)** The exchange completion data keeping device according to claim 24, wherein the predetermined condition is a condition such that the exchange completion data deletion ~~means unit~~ deletes the first exchange completion data registered by the first unit and second unit and the second exchange completion data registered by the second unit, if the exchange completion data deletion ~~means unit~~ is notified from either the first unit or the second unit that the encrypted content data of interest has not been received successfully.



**Claim 27 (Currently Amended)** A computer-readable recording medium having a program recorded thereon, the program for instructing a computer device to exchange first content data of interest that is owned by the computer device with second content data of interest to the computer device that is owned by another computer device, the computer device ~~and the other computer device~~ encrypting the first content data of interest owned ~~thereby~~ by the computer device, respectively, when the first content data of interest is exchanged ~~therebetween~~ between the computer device and the other computer device, the other computer device encrypting the second content data of interest owned by the other computer device when the second content data of interest is exchanged between the computer device and the other computer device, and the program causing the computer device to execute a method comprising:

instructing the computer device to produce first exchange completion data that is a decryption key and that is necessary for reproducing encrypted first content data of interest to the other computer ~~that is~~, the encrypted first content data of interest being obtained by encrypting the first content data of interest to the other computer that is owned by the computer device;

instructing the computer device to register the first exchange completion data produced by the computer device at an exchange completion data keeping device ~~for keeping exchange completion data~~, the exchange completion data keeping device storing the first exchange completion data; and

instructing the computer device to obtain, from the exchange completion data keeping device, second exchange completion data that is a decryption key, and that is necessary for reproducing encrypted second content data of interest to the computer device ~~that is~~, the second encrypted content data of interest being obtained from the other computer device when a

communication session with the other computer device is terminated,

wherein the exchange completion data keeping device transmits (i) the first exchange completion data to the other computer device, and (ii) the second exchange completion data to the computer device, the transmitting of the first and second exchange completion data being performed only when the computer device ~~and the other computer device have~~ has successfully received from the other computer device the encrypted second content data of interest to the computer device and when the other computer device has successfully received from the computer device the encrypted first content data of interest to the other computer device.

**Claim 28 (Currently Amended)** A computer-readable recording medium having a program recorded thereon, the program for instructing a computer device to exchange first content data of interest that is owned by the computer device with second content data of interest to the computer device that is owned by another computer device, the computer device ~~and the other computer device~~ encrypting the first content data of interest owned thereby by the computer device, respectively, when the first content data of interest is exchanged ~~therebetween~~ between the computer device and the other computer device, the other computer device encrypting the second content data of interest owned by the other computer device when the second content data of interest is exchanged between the computer device and the other computer device, and the program causing the computer device to execute a method comprising:

instructing the computer device to request an exchange completion data keeping device for keeping exchange completion data to produce first exchange completion data that is a decryption key, and that is necessary for reproducing encrypted first content data of interest to

the other computer device ~~that is, the encrypted first content data being~~ obtained by encrypting the first content data of interest that is owned by the computer device; and

instructing the computer device to obtain, from the exchange completion data keeping device, second exchange completion data that is a decryption key, and that is necessary for reproducing encrypted second content data of interest to the computer device ~~that is, the encrypted second content data being~~ obtained from the other computer device when a communication session with the other computer device is terminated,

wherein the exchange completion data keeping device transmits (i) the first exchange completion data to the other computer device, and (ii) the second exchange completion data to the computer device, the transmitting of the first and second exchange completion data being performed only when the computer device ~~and the other computer device have~~ has successfully received from the other computer device the encrypted second content data of interest to the computer device and when the other computer device has successfully received from the computer device the encrypted first content data of interest to the other computer device.

**Claim 29 (Currently Amended)** A computer-readable recording medium having a program recorded thereon, the program for instructing ~~a computer device~~ an exchange completion keeping device, which is used in a system for exchanging content data of interest between ~~computer devices~~ a first computer device and a second computer device connected to each other via a communication medium, ~~to function as~~ and the program causing the exchange completion keeping device to execute a method comprising:

storing first exchange completion data that is a decryption key, and that is necessary for

reproducing encrypted second content data of interest to the first computer device that is obtained by the first computer device from the second computer device;

~~exchange completion data keeping means for keeping storing second~~ exchange completion data that is a decryption key, and that is necessary for reproducing encrypted first content data of interest to the second computer device ~~that is encrypted and exchanged between a first computer device and a second computer device~~ that is obtained by the second computer device from the first computer device; and

~~exchange completion data transmission means for transmitting the first~~ exchange completion data ~~that is necessary for reproducing encrypted content data of interest that is obtained by the first computer device to the first computer device and transmitting the second~~ exchange completion data ~~that is necessary for reproducing encrypted content data of interest that is obtained by the second computer device to the second computer device,~~ the transmitting of the first and second exchange completion data being performed only when the first ~~and second~~ computer device ~~have~~ has successfully received from the second computer device the encrypted second content data of interest to the first computer device and when the second computer device has successfully received from the first computer device the encrypted first content data of interest to the second computer device.